

GINZBURG, A.I.

Bityte-lithium-beryllian margarite, Trudy Min. muz. no. 8:128-131
'57. (MIRA 11:3)
(Margarite)

GINEBURG, A.I.

Composition of zinc rockbridgeite. Trudy Min. muz. no.8:131-134
'57. (MIRA 11:3)
(Rockbridgeite--Analysis)

GINZBURG, A.I.

Genetic types of rare element deposits. Razved. i okh. nedr 23 no.6:
1-12 Ja '57. (MIRA 11:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.
(Chemical elements) (Mineralogy)

3(5), 15(6)

PHASE I BOOK EXPLOITATION

SOV/1644

Ginzburg, A.I., Ye.A. Nechayeva, Yu.B. Lavrenov, and L.K. Pozharitskaya

Geologiya mestorozhdeniy redkikh elementov. vyp. 1: Redkometal'nyye karbonatity
(Geology of Rare Element Deposits. no. 1: Rare Metal Carbonatites) Moscow,
Gosgeoltekhizdat, 1958. 126 p. 5,000 copies printed.

Sponsoring Agency: Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya

Eds.: A.I. Ginzburg, and S.V. Ovchinnikova; Tech. Ed.: T.A. Averkiyeva; Editorial
Board: A.I. Ginzburg (Chairman), I.I. Malyshev, G.G. Rodionov, F.P. Pavgutov,
N.A. Krushchov, Yu.L. Chernosvitov, I.V. Shmanenkov, V.V. Shcherbina, and M.A. Eygeles.

PURPOSE: This booklet is intended primarily for geologists. It may, however, because
of its non-technical nature be of interest to the general reader.

COVERAGE: The introductory chapters of this booklet give a short history of the explo-
ration and study of carbonatites. Approximately half of the contents are devoted
to a description of the geological and geochemical properties of some rare minerals,
mainly niobium. These descriptions are aided by the use of tables and charts.
The second half of the book gives a physical description and the geographical loca-
tion of some of the well known deposits of the world. There are 131 references of
which 16 are Soviet.

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Geology of Rare Element Deposits.

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From the Editor

Foreword

The Geological, Mineralogical and Geochemical Characteristics of Carbonite Deposits
(L.K. Pozharitskaya, and A.I. Ginzburg)

A Brief Description of Non-Soviet Carbonatite Deposits

Carbonatite deposits of Europe

Deposits of Alno Island (Ye.A. Nechayeva)

Deposits of the Fen Region (Yu.B. Lavrenov)

Carbonatite deposits of Africa (L.K. Pozharitskaya)

Carbonatite deposits of America (L.K. Pozharitskaya)

Basic Characteristics of the Alkaline Group of Minerals (Ye.A. Nechayeva)

Bibliography (D.B. Yegorov)

AVAILABLE: Library of Congress

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MM/hcr
5-11-59

AUTHORS: Ginzburg, A. I., Gorzhevskaya, S. A. SOV/7-58-5-10/15
Yerofeyeva, Ye. A., Sidorenko, G. A.

TITLE: On the Chemical Composition of the Cubic Titanium-Tantalum
Niobates (O khimicheskom sostave kubicheskikh titano-tantalo-
niobatov)

PERIODICAL: Geokhimiya, 1958, Nr 5, pp 486 - 500 (USSR)

ABSTRACT: The specific properties of the so-called mineral group are
described in detail in the beginning; then the division into
the perovskite type (ABX_3) and pyrochlorine type ($A_2B_2X_7$)
is discussed. 22 chemical and x-ray analyses (Table 3) are
the basis of this paper. A number of analyses are plotted in
several diagrams of ternary systems: Nb - Ti - Ta (Fig 1);
A - B - X (Fig 5); Nb - Ti, Zr - Ta (Fig 6); Ca - TR - U - Th
(Fig 7). The dependence of the lattice constant on the TiO_2
content in the perovskite group (Fig 2) and in the pyrochlorine
group (Fig 3) is also shown. The result of the paper is a
classification of the mineral groups investigated (Table 2).
The empiric formulae of minerals greatly differ from the

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On the Chemical Composition of the Cubic Titanium-
Tantalum Niobates

SOV/7-58-5-10/15

theoretical formulae generally adopted for them. A deficiency of cations in the group "A" was found. In connection herewith the formula $A_{n-x} B_p X_q$ is proposed where x denotes the value determining the deficiency in the atomic numbers of the group "A". For the pyrochloric type the formula then reads $A_{2-x} B_2 X_7$, and for the perovskite type $A_{1-x} B X_3$, or $A_{2-x} B_2 X_6$. The atomic proportion of the cations of the group "A" in the cubic titanium-tantalum niobates ranges from 2,0 to 0,5, a definite dependence between the extent of the cation deficiency in the group "A" and the content of titanium, zirconium, uranium, thorium and water in minerals having been observed. The usual minerals with an increased cation deficiency in the group "A" are metamictic minerals. There are 9 figures, 3 tables, and 23 references, 15 of which are Soviet.

ASSOCIATION: Vsesoyuznyy institut mineral'nogo syr'ya, Moskva (All Union Institute for Mineral Raw Materials, Moscow)

SUBMITTED: March 17, 1958
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On the Chemical Composition of the Cubic Titanium-
Tantalum Niobates

SOV/7-58-5-10/15

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GINZBURG, A.I.
AUTHOR: Ginzburg, A.I.

11-58-6-7/13

TITLE: On the Classification and Nomenclature of Coal Microcom-
ponents (O klassifikatsiyakh i nomenklaturakh mikrokompo-
nentov ugley)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, 1958,
Nr 6, pp 88-94 (USSR)

ABSTRACT: The author studied various methods of classifying micro-
components of coal. By the old system [Ref 3, 4], all
microcomponents of humic coals were divided into 4 basic
groups, three of which represented the products of trans-
formation of vegetable fiber, and the fourth - spores,
cuticules and resinous bodies. Another method was pre-
sented by I.E. Val'ts [Ref 2]. She introduced a series
of new denominations. This method is described in detail.
The All-Union Petrographic Conference in 1956 established
another nomenclature of petrographic coal components
(Table 1), which calls for five groups of microcomponents.
The author is of the opinion that the old [Ref 3, 4]
method, with adjustments, is the best method. The Val'ts
method could be used for brown coal, and the method ac-
cepted in 1956 - for coal used for coking purposes.

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11-58-6-7/13

On the Classification and Nomenclature of Coal Microcomponents

There are 2 tables and 5 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut Ministerstva geologii i okhrany nedr SSSR, Leningrad
(All-Union Scientific-Research Geological Institute at the Ministry of Geology and Conservation of Mineral Resources of USSR, Leningrad)

SUBMITTED: August 24, 1957

AVAILABLE: Library of Congress

Card 2/2 1. Geology 2. Coal-Transformations

GINZBURG, A.I.; FEL'DMAN, L.G.; STAVROV, O.D.

Trace elements in igneous rocks; results of the symposium on the
geochemistry of trace elements in connection with petrogenesis.
Sov. geol. 1 no.4:170-178 Ap '58. (MIRA 11:6)

1. Vsesoyuznyy institut mineral'nogo syr'ya.
(Trace elements) (Igneous rocks)

KALENOV, A.D.; LIBERMAN, R.M.; GINZBURG, A.I., nauchnyy red.; YERSHOV, A.D., glavnyy red.; NEKRASOVA, N.B., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's demands in the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.68. [Scandium] Skandii. Izd.2., perer. 1959. 17 p. (MIRA 12:8)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Ores---Sampling and estimation)

KOGAN, B.I.; ~~QINZHURQ, A.L.~~ nauchnyy red.; NEKRASOVA, N.B., red.izd-vn;
IVANOVA, A.G., tekhn.red.

[Quality required by industry in mineral raw materials; handbook
for geologists] Trebovaniia promyshlennosti k kachestvu mine-
ral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geologii i okhrane
nedr. No.41. [Lithium] Litii. 1959. 26 p. (MIRA 12:11)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mine-
ral'nogo syr'ya.

(Lithium)

ZIV, Ye.F.; VAYSINBERG, A.I.; STEPANOV, I.S., nauchnyy red.; YERSHOV, A.D., glavnyy red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; ERKYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; CHERNOSVITOV, Yu.L., red.; SHMAHENKOV, I.V., red.; NEKRASOVA, N.B., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to the quality of mineral raw material; handbook for geologists] Trebovaniya promyshlennosti k kachestvu mineral'nogo syr'ya; spravochnik dlia geologov, Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.49. [Niobium and tantalum] Niobii i tantal. Izd.2., perer. 1959. 49 p. (MIRA 12:12)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya. (Niobium) (Tantalum)

MILOVANOV, G.N.; CHERNOSVITOV, Yu.L.; GINZBURG, A.I., nauchnyy red.;
YERSHOV, A.D., glavnyy red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.;
KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.;
KHMUSHCHOV, N.A., red.; SHMANENKOV, I.V., red.; IZRAILEVA, G.A.,
red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to the quality of mineral raw material;
handbook for geologists] Trebovaniya promyshlennosti k kachestvu
mineral'nogo syr'ya; spravochnik dlia geologov. Moskva, Gos.nauchno-
tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.51. [Rare earth
elements] Redkozemel'nye elementy. Izd.2., perer. 1959. 58 p.
(MIRA 12:12)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'-
nogo syr'ya.

(Rare earths)

CHERNOSVITOV, Yu.L.; KONSTANTINOV, M.M., nauchnyy red.; YERSHOV, A.D., glavnyy red.; SEMANENKOV, I.V., zam.glavnogo red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; NEKRA-SOVA, N.B., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industrial requirements for the quality of raw minerals; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane neдр. No.67. [Uranium] Uran. Nauchn. red.M.M.Konstantinov. Izd.2., perer. 1959. 65 p. (MIRA 13:1)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Uranium)

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SOV/7-59-2-5/14

AUTHORS: Vaynshteyn, E. Ye., Ginzburg, A. I., Shevalevskiy, I. D.

TITLE: On the Ratio of Hafnium and Zirconium in the Zircons of
Granite Pegmatites (O sootnoshenii gafniya i tsirkoniya v
tsirkonakh granitnykh pegmatitov)

PERIODICAL: Geokhimiya, 1959, Nr 2, pp 124-129 (USSR)

ABSTRACT: 25 samples of the zircon group were investigated by the X-ray spectrographic method. The samples were: 1) zircons from medium- and coarse-grained plagioclase-microcline-biotite pegmatites (Table 1, Analyses 1-7); 0.7-1.4% HfO_2 , $\text{ZrO}_2/\text{HfO}_2$ between 46 and 89. 2) Cirtolites from uranium - rare earths pegmatites (Table 1, Analyses 8-13); 2.7-6.1% HfO_2 , $\text{ZrO}_2/\text{HfO}_2$ 9-24. 3) Cirtolite from a beryl - muscovite pegmatite (Table 1, Analysis 14); HfO_2 3.3%, $\text{ZrO}_2/\text{HfO}_2$ 17.3. 4) Cirtolites from strongly albitized pegmatites (Table 1, Analyses 15-18); 5.3-7.4 % HfO_2 , $\text{ZrO}_2/\text{HfO}_2$ 8 - 11.5. 5) Late cirtolites from replacement pegmatites bearing rare metals (Table 1, Analyses 19 - 24); 6.6 - 13.8% HfO_2 , the $\text{ZrO}_2/\text{HfO}_2$ ratio varies between 3.7 and 9.1. Table 2 is a summary of table 1. This in-

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SOV/7-59-2-5/14

On the Ratio of Hafnium and Zirconium in the Zircons of Granite Pegmatites

Investigation shows that hafnium is enriched in the course of the pegmatite process while the zirconium-hafnium ratio decreases; early formed zircons correspond completely to the zircons contained in granites. In pegmatites descended from alkali syenites or granosyenites zircons have a strikingly high zirconium-hafnium ratio. This may be used in determining genetic relationships. Zircons of metasomatic origin have a ZrO_2/HfO_2 ratio of between 3 and 20, while the ratio to be found in zircons from pneumatolytic - hydrothermal ore veins ranges from 25 to 45. Zircons of the last stages of the pegmatitic process contain up to 14% HfO_2 ; they may be regarded as hafnium minerals proper. There are 2 tables and 9 Soviet references.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy AS USSR). Vsesoyuznyy institut mineralnogo syr'ya, Moskva (All-Union Institute of Mineral Raw Materials, Moscow)

SUBMITTED: November 13, 1958

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GINZBURG, A.I.

New types of rare metal deposits. Geol. rud. mestorozh. no.3:34-47
My-Je '59. (MIRA 12:10)

1. Vsesoyuznyy institut mineral'nogo syr'ya, Moskva.
(Ore deposits)

GINZBURG, A.I.; ZHURAVLEVA, L.N.

Genetic types of deposits of rare earth elements. Geol.
most. red. elem. no.3:59-103 '59. (MIRA 14:7)
(Rare earth metals)

GINZBURG, A.I.

Conclusion. Geol. mest. red. elem. no.3:104-109 '59.
(Rare earth metals) (MIRA 14:7)

S/081/62/000/008/015/057
B166/B101

AUTHOR: Ginzburg, A. I.

TITLE: Aspects of germanium geochemistry and prospecting indicators
 of rich germanium ores

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 8, 1962, 94, abstract
 837 (Geol. mestorozhd. redk. elementov. M., Gosgeoltekhizdat,
 no. 5, 1959, 86-91)

TEXT: Published data on the geochemistry of germanium are examined and
 consolidated from the point of view of crystal-chemical features and the
 redox potential of the medium. Conclusions are drawn concerning the
 conditions under which deposits of Ge minerals and prospecting indicators
 facilitating the discovery of rich Ge ores are formed. [Abstracter's
 note: Complete translation.]

GINZBURG, A.I.

Relation between enclosing rocks and granite-bearing pegmatites
of the soda-lithium type. Trudy Min.muz. no.9:53-58 '59.
(MIRA 12:6)

(Mineralogy)

3(8)

AUTHOR: Ginzburg, A. I.

SOV/20-124-4-51/67

TITLE: Sulfide Concretionary Formation in the Coal Seams of the Angrenskoye Deposit (Sul'fidnyye konkretionnyye obrazovaniya v ugol'nykh plastakh Angrenskogo mestorozhdeniya)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 907-910 (USSR)

ABSTRACT: There are only a few data on the above mentioned formations available in publications though concretions are important to the genesis of coals. They are briefly described in the present paper. The deposit mentioned in the title belongs to the Middle Jurassic and is divided into two parts (lower coal seam, 30-50 m thick, simple structure; upper part - complex alternation of coal seams with the rock). The coal is described in detail. The above mentioned concretions occur more frequently in the coal seams than in the rock; in the latter case, however, they are to be found only at the contact point with the coal seam (Fig 1). In the lower seam the concretions are irregularly distributed throughout the coal mass and are bound to their individual horizons. They are often accumulated (Fig 2). In the North there are much more concretions than 2 km south in the same part of the seam. In the South lenticular formations predominate while in the central part and in the North there

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SOV/20-124-4-51/67

Sulfide Concretionary Formation in the Coal Seams of the Angrenskoye Deposit

is a somewhat larger amount of ball-shaped and bump-like inclusions. Thus, it could not be observed that the concretions are rigidly bound to certain seams and horizons. The concretionary forms are shown in figure 3: 1, 2 and are described in details. In a macroscopic sense, almost all of them are yellow with various shades. The crystalline structure is not always distinctly marked. Their specific weight is high. Under the microscope (under the assistance of B. B. Rozina) iron disulfide (primarily pyrites, less marcasite with a small amount of melnicovite) was detected. The spectroscopic analysis (Table 1) showed the occurrence of molybdenum, copper, lead, zinc, and germanium, as well as a considerable amount of arsenic. Provided the respective concretions are contained directly in the coal, there are splinters of plant tissues in good condition to be seen under the microscope, which are mineralized by the sulfides, with the only exception of a cake-shaped pyritic concretion (Sample 239) on the base of the coal seam. A large amount of plant residues is mineralized by marcasite here. Only interstices are filled with pyrite which probably was formed a little later (Fig 3:4). There are also some concretionary formations representing pseudomorphs of wood splinters. Here it can be clearly observed that the channels in the wood are filled with sulfurous iron solutions.

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Sulfide Concretionary Formation in the Coal Seams of the Angrenskoye Deposit

The organic substance of the concretions is represented primarily by plant tissues (wood). In individual cases, annual rings and also tracheids are visible. The plant group cannot be determined. From the observations the following assumptions may be made: the concretions were formed in situ. Apparently, iron in the form of oxide as well as sulfur were present in the swamp water; sulfur was produced by the reductive medium. The specific medium caused the reduction of trivalent to bivalent iron which represents a constituent of iron disulfide. It may be supposed that iron disulfide had been deposited first as melnicovite which afterwards crystallized to pyrite and marcasite, according to conditions. The plant tissues which are in good condition (e.g. compressed trunks) indicate that concretionary formation began in the early period of peat accumulation. In the peatbog all processes of transformation and the solidification of the plant material were not yet finished. Consequently, the concretions were formed before the diagenesis of the entire peat deposit. - There are 3 figures and 1 table.

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30V/20-124-4-51/67

Sulfide Concretionary Formation in the Coal Seams of the Angrenskoye Deposit

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut
(All-Union Scientific Research Institute of Geology)

PRESENTED: June 20, 1958, by N. M. Strakhov, Academician

SUBMITTED: June 3, 1958

PETROVSKAYA, N.V.; KLIMENKO, N.G.; GINSBURG, A.I., nauchnyy red.;
YERSHOV, A.D., glavnyy red.; CHERNOSVITOV, Yu.L., zam. glavnogo
red.; SHMANENKOV, I.V., zam. glavnogo red.; ZVEREV, L.V., red.;
ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.;
SOLOV'YEV, D.V., red.; KHRUSHCHOV, M.A., red.; STOMEROV, A.G.,
red. izd-va; IVANOVA, A.G., tekhn. red.

[Industrial requirements for the quality of mineral raw materials;
handbook for geologists] Trebovaniya promyshlennosti k kachestvu
mineral'nogo syr'ya; spravochnik dlia geologov. Izd. 2., perer.
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr.
No. 71. [Selenium and tellurium] Selen i tellur. Nauchn. red. A.I.
Ginsburg. 1960. 45 p. (MIRA 14:1)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mine-
ral'nogo syr'ya.
(Selenium ores) (Tellurium ores)

SHCHERBINA, V.V.; GINZBURG, A.I., red. vypuska; MALYSHEV, I.I., red.;
POLYAKOV, P.A., red.; RODIONOV, G.G., red.; STEPANOV, I.S., red.;
TROKHACHEV, P.A., red.; FAGUTOV, V.P., red.; KHRUSHCHOV, N.A.,
red.; CHERNOSVITOV, Yu.L., red.; SHMANENKOV, I.V., red.
KYGELES, M.A., red.; ROZHKOVA, L.G., red. izd-va; IYERUSALIMSKAYA,
Ye.S., tekhn. red.

[Geology of rare metal deposits] Geologiya mestorozhdenii
redkikh elementov. No. 8 [Geochemical characteristics of scandium
and types of its deposits.] Osobennosti geokhimii skandia i
tipy ego mestorozhdenii. Moskva, Gos.nauch.-tekhn.izd-vo lit-ry
po geol. i okhr. nedr, 1960, 56p. (Geologiya mestorozhdenii
redkikh elementov, no. 8). (MIRA 13:11)
(Scandium)

ZHEMCHUZHNIKOV, Yuriy Appolonovich; GINZBURG, Anna Il'inichna;
POGREBITSKIY, Ye.O., otv.red.; GODOVIKOVA, L.A., red.izd-va;
BRUZGUL', V.V., tekhn.red.

[Principles of coal petrology] Osnovy petrologii uglei. Moskva,
Izd-vo Akad.nauk SSSR, 1960. 399 p. (MIRA 13:2)
(Coal geology)

GINZBURG, A.I.; GOMZHEVSKAYA, S.A.; YEROFYEVA, Ye.A.; SIDORENKO, G.A.

Chemical composition of tetragonal titanium-tantalum-
niobates. Geokhimiia no.1:11-30 '60. (MIRA 13:6)
(Fergusonite)

GINZBURG, A.I., RODIONOV, G.G.

Subsurface formations of granitic pegmatites. Geol. rud. mesto-
rozh. no.1:45-54 Ja-F '60. (MIRA 13:7)

1. Vsesoyuznyy institut mineral'nogo syr'ya, Moskva.
(Pegmatites)

S/081/62/000/010/028/085
B177/B144

AUTHORS: Ginzburg, A. I., Gorzhevskaya, S. A.

TITLE: Characteristics of titanium-tantalum-niobates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 108 - 109, ab-
stract 10361 (Sb. "Geol. mestorozhd. reuk. elementov", no. 10,
M., Gosgeoltekhizdat, 1960, 5 - 10)

TEXT: The composition of titanium-tantalum-niobates is conventionally represented by the formula $A_m B_p X_q$, where A and B combine cations of closely similar dimensions. In many of them, the group A cations are less strongly bound with oxygen than group B cations. Group A includes cations with large R_1 : Ca, Na, Y, TR, Th, U, and to a lesser extent K, Pb, Ba, Sr, Mn and others. Group B includes cations having relatively small R_1 : Ti, Nb, Ta, W and also Al, Si, P and others. For several titanium-tantalum-niobates, group A may usefully be subdivided into two sub-groups, A^1 and A^2 , whereof A^1 includes Ca, Na, U, Th, TR whilst A^2 includes Fe^{2+} , ✓

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Characteristics of...

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Mn, Mg. In many cases a deficiency of cations exists in group A. In the minerals described, both isovalent and heterovalent substitutions are widely developed. It is observed that, as the ratio between atomic quantities of cations in group A and the atomic quantities of oxygen increases, the syngony of titanium-tantalum-niobates decreases. The variable composition of many minerals is governed by the different processes that change them, which mostly take place under hydrothermal conditions. Probably the processes of change are connected with the extraction of water and with the partial leaching of cations in group A besides others. [Abstracter's note: Complete translation.] ✓

S/081/62/000/010/032/085
B177/B144

AUTHORS: Ginzburg, A. I., Gorzhevskaya, S. A.

TITLE: Cubic titanium-tantalum niobates. The composition of the rare-earth elements

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 109, abstract 10066 (Sb. "Geol. mestorozhd. reuk. elementov", no. 10, M., Gosgeoltekhizdat, 1960, 84 - 89)

TEXT: The minerals of the perovskite type related to ultrabasic alkaline intrusive complexes, are highly selective Ce minerals, though they also contain La, Nd, and some Sm. Pyrochlores from carbonatites, alkaline beds and their pegmatites possess a constant TR composition. There is a marked predominance in them of elements in the Ce group, with slight quantities of Gd and Dy. In pyrochlores from albitites, related to sub-alkaline granitoids, TR of the Y sub-group occur in slight quantities. In pyrochlore-type minerals encountered in granitic pegmatites, the TR content is very variable. A typical feature of them is the higher content of the middle members of the series TR - Sm, Gd, Dy, and sometimes Ce.

[Abstracter's note: Complete translation.]

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S/081/62/000/010/039/085
B177/B144

AUTHORS: Ginzburg, A. I., Gorzhevskaya, S. A.

TITLE: Tetragonal tantalum-niobates. Composition of rare-earth elements

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 110, abstract 10673 (Sb. "Geol. mestorozhd. redk. elementov". no. 10, X., Gosgeoltekhizdat, 1960, 144 - 152)

TEXT: Fergusonites are distinguished from other titanium-tantalum-niobates by their content of Y and TR Y sub-groups. The content of Y fluctuates from 40 to 70% of the entire TR content. Different genetic types of fergusonites are characterized by a specific TR composition. In some types of deposit, fergusonite is a substantially ytterbium-bearing mineral (unsubstituted granitic pegmatites); in others, dysprosium-ytterbium-bearing (accessory in granites); substantially dysprosium-bearing (quartz albitites connected with granosienites); cerium-dysprosium-bearing (alkaline pegmatites); neodymium-dysprosium-bearing (albitised alkaline beds and albitised granitic pegmatites). The ratios in

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Tetragonal tantalum-niobates...

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1 fergusonites [Y, Zr, Ce, Yb, Dy, and Ce, Nd may be regarded as indicative, enabling one to judge the relation of fergusonites to various intrusive beds and to different genetic types of deposits. [Abstracter's note: Complete translation.]

GINZBURG, A.I.; GORZHEVSKAYA, S.A.; YEROFYEVA, Ye.A.; SIDORENKO, G.A.;
MALYSHEV, I.I., red.; POLYAKOV, M.V., red.; RODIONOV, G.G., red.;
STIPANOV, I.S., red.; TROKHACHEV, P.A., red.; FAGUTOV, V.P., red.;
KHUSHCHOV, N.A., red.; CHERNOSVITOV, Yu.L., red.; SHMARENKOV, I.V.,
red.; SHCHERBINA, V.V., red.; EYGELES, M.A., red.; NEMANOVA, G.F.,
red.izd-va; BYKOVA, V.V., tekhn.red.

[Titanates, tantalates, and niobates] Titano-tantalo-niobaty.
Moskva. Gos. nauchno-tekhn.izd-vo lit-ry na geol.i okhrane nedr.
Part 1. 1960. 166 p. (Geologiya mestorozhdenii redkikh elementov,
no.10). (MIRA 14:6)
(Titanates) (Tantalates) (Niobates)

PYATNOV, V.I.; BIBIKOVA, V.I.; DARVOYD, T.I.; IVANOVA, R.V.; KASATKINA,
 N.A.; GINZBURG, A.I., nauchnyy red.; NEMANOVA, G.F., red. izd-va;
 BYKOVA, V.V., tekhn. red.

[Industry's requirements as to quality of mineral raw materials]
Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravoch-
nik dlia geol'gov. Izd.2., perer. Moskva, Gos. nauchno-tekhn. izd-vo
lit-ry po geol. i okhrane nedr. No.53. [Thallium, indium, gallium]
Tallii, indii, gallii. By V.I.Piatnov i dr. Nauchn. red. A.I.Ginzburg.
1961. 53 p. (MIRA 24:11)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'-nogo syr'ya.
(Thallium) (Indium) (Gallium)

GINZBURG, A.I.; VOLZHENKOVA, A.Ya.; POLKUNOV, V.F.

Characteristics of spodumene pegmatites in carbonate rocks. Geol.
rud. mestorozh. no.1:52-60 Ja-F '61. (MIRA 14:4)

1. Vsesoyuznyy institut mineral'nogo syr'ya, Moskva.
(Spodumene)

S/007/61/000/002/004/004
B107/B202

AUTHORS: Ginzburg, A. I., Stavrov, O. D.
TITLE: Content of rare elements in cordierites
PERIODICAL: Geokhimiya, no. 2, 1961, 183-185

TEXT: Until recently only little attention has been paid to the composition of cordierites, above all, to their content of rare elements, although cordierite is an especially interesting mineral from this point of view. Hollow channels were observed in its ring structure which is analogous to that of beryllium. Like in beryllium and milarite, the occurrence of large ions, such as calcium and sodium, potassium, rubidium, and cesium ions which are isomorphous to it, is expected in these channels. Furthermore, the authors point to the fact that the composition of cordierite is interesting also from another point of view. As was observed in recent years (A. I. Ginzburg, G. G. Rodionov, Ref. 1), rare-metal pegmatites are formed only at certain depths, and therefore they are found in most cases within metamorphic sediments at this depth. Andalusite and cordierite are typical minerals

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B107/B202

Content of rare ...

of these rocks. For this reason, cordierite is frequently found in rocks surrounding rare-metal pegmatites, and occurs in exocontacts of pegmatite dikes and in pegmatite dikes as a typical "xenolithic" mineral. Usually, lithium is transported from lithium pegmatite into the surrounding rocks where it is fixed in magnesium-containing minerals - biotite and amphibole - which, in turn, are transformed into protolithionite or lithionite, and into holmquistite. In this connection, the problem arises whether lithium participates in the formation of cordierite, and whether lithium cordierite occurs in nature. To answer these questions, O. D. Stravrov analyzed cordierite samples from various regions of the world for rare alkalies. He obtained the following results:

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Content of rare ...

Origin of sample	region	Li ₂ O	Tables 1 and 2		BeO
			Rb ₂ O	Cs ₂ O	
from metamorphic sediments without occurrence of lithium pegmatites	Switzerland	0.11	not found		0.004
from metamorphic sediments in regions with alkali massives	Norway	0.02	n.f.	n.f.	0.004
from metamorphic sediments in regions with occurrence of pegmatites	Bavaria	0.02	n.f.	n.f.	0.04
without lithium minerals	Madagaskar	0.043	n.f.	n.f.	0.005
From endo contact zones of pegmatites without lithium minerals	Northern Pribaykal'ye	0.043	n.f.	n.f.	n.f.
from endo contact zones of beryllium-muscovite pegmatites containing triphyline	Ural, Murzinka	0.19	0.005	0.023	0.16
	Turkestan-skiy Range	0.43	n.f.	n.f.	0.0052

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Content of rare ...

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Origin of sample	region	Tables 1 and 2			
		Li ₂ O	Rb ₂ O	Cs ₂ O	BeO
from metamorphic sediments at certain distances	Eastern Siberia	0.24	n.f.	n.f.	0.004
from apatite pegmatites					
from metamorphic sediments	Eastern	0.64	0.05	0.2	
near apatite pegmatites	Siberia				

Pure cordierites were analyzed, some of which had been collected by the authors, while others had been made available by L. G. Fel'dman and I. N. Timofeyev from the collections of the Mineralogicheskii muzey AN SSSR im. akad. A. Ye. Fersman (Mineralogical Museum AS USSR imeni Academician A. Ye. Fersman). Lithium analyses were made by flame photometry. Rubidium and cesium were analyzed directly by spectrum analysis (A. K. Rusanov, V. G. Khitrov, N. T. Batova, Ref. 3). The following conclusions can be drawn from the data mentioned: (1) The maximum amount of lithium is contained in cordierites from areas with lithium pegmatites. A lower amount is contained in cordierites from beryllium pegmatites which contain only small amounts of lithium. (2) Cordierite also contains Cs. in some cases even up to tenth %.

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Apparently, Cs occupies the same place in cordierite as in beryllium. Like in beryllium, the amount of Cs is much larger than that of Rb. Since cordierite is a magnesium mineral, lithium contained therein apparently replaces magnesium, much like in mica, tourmaline and amphibole. This replacement may take place in two ways: (A. I. Ginzburg, Ref. 4). (a) Two magnesium

ions can be replaced by lithium and aluminum: $2\text{Mg}^{2+} \leftarrow \text{Li}^+ + \text{Al}^{3+}$. With the cordierite composition $(\text{Mg}, \text{Fe})_2\text{Al}_3[\text{Si}_5\text{AlO}_{18}]$, the lithium analog of

cordierite will have the following composition in the case of the mentioned replacement: $\text{LiAl}_4\text{Si}_5\text{AlO}_{18}$; (b) the magnesium ion can be replaced by

lithium; valency is compensated such that aluminum is replaced by silicon having a coordination number of four, i. e., $\text{Mg}_{(\text{VI})}^{2+} + \text{Al}_{(\text{IV})}^{3+} \leftarrow \text{Li}_{(\text{VI})}^+ + \text{Si}_{(\text{IV})}^{4+}$.

In this case lithium cordierite will have the following composition:

$(\text{Mg}, \text{Fe})\text{LiAl}_3[\text{Si}_6\text{O}_{18}]$ or $(\text{Mg}, \text{Fe})\text{LiAlAl}_2[\text{Si}_6\text{O}_{18}]$ which is close to the beryllium composition: $\text{Be}_3\text{Al}_2[\text{Si}_6\text{O}_{18}]$. The lithium-containing cordierite of the

composition $(\text{Mg}, \text{Fe})\text{LiAlAl}_2[\text{Si}_6\text{O}_{18}]$ differs from beryllium in that it contains —

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one magnesium, lithium, and aluminum ion instead of the three beryllium ions. In this connection it should be added that N. V. Belov (Ref. 5) regards the replacement of beryllium by lithium as possible since he assumes that lithium may have a coordination number of six four. Also the replacement of beryllium by aluminum is regarded as possible. R. E. Folinsbee (Ref. 6) assumes that the replacement of beryllium by magnesium is possible without essential structural changes. Since beryllium and cordierite have the same structure it can be assumed that beryllium may enter the cordierite structure (A. I. Ginzburg, Ref. 7). For this reason R. D. Pavlova made quantitative analyses of beryllium oxide in various cordierites in the spectral laboratory of the authors' institute. As may be seen therefrom no large amounts of BeO are found in the cordierites. The largest amounts - between 0.15 and 0.20 % - are found in cordierites from some pegmatite deposits. Cordierites from metamorphic sediments contain almost no beryllium oxide. The following conclusions can be drawn: (1) owing to their ring structure cordierites may contain - similar to beryllium - considerable amounts of alkali, Na, Li, Cs. (2) Cordierites may be enriched with Cs. (3) Cordierite may serve as characteristic mineral indicator of the occurrence of lithium pegmatites. (4) Natural occurrence of a Li cordierite of the composition $\text{LiMgAl}_3[\text{Si}_6\text{O}_{18}]$

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B107/B202

Content of rare ...

is possible. [Abstracter's note: Complete translation]. There are 2
tables and 7 references: 6 Soviet-bloc.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo
syr'ya, Moskva (All-Union Scientific Research Institute of
Mineral Raw Materials, Moscow).

SUBMITTED: March 18, 1960

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S/081/62/010/010/024/085
B138/B101

AUTHOR: Ginzburg, A. I.

TITLE: New data on the mineralogy of deposits of rare elements

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 102, abstract 10612
(Sb. "Geol. mestorozh. redk. elementov". no. 9, II.,
Gosgeoltekhizdat, 1961, 3 - 27)

TEXT: This is a review of the most important new data obtained from 1956 to 1959 as a result of mineralogical investigations covering different types of rare metal deposits: 1) granite ranges enriched by accessory rare metal minerals, and placer deposits connected with them; 2) granite pegmatites; 3) pneumatolithic hydrothermal formations connected with granites; 4) the pegmatites of alkaline magmas; 5) pneumatolithic hydrothermal formations connected with alkaline rock (albitites); 6) carbonatites; 7) hydrothermal deposits of rare earth formations. [Abstracter's note: Complete translation.]

Card 1/1

GINZBURG, A.I.; NAZAROVA, A.S.; SUKHOMAZOVA, L.L.

Nigerite from Siberian permatites. Geol.mest.red.elem. no.9:
61-67 '61. (MIRA 14:9)
(Siberia--Nigerite) (Siberia--Pegmatites)

GINZBURG, A.I.; YAKOVLEVA, M.Ye.

Some phenomena of the redeposition of spodumene in pegmatites.
Trudy Min. muz. no.11:3-12 '61. (MIRA 16:7)

(Pegmatites) (Spodumene)

ORLOV, Yu.L.; GINZBURG, A.I.; PINEVICH, N.G.

Paragenetic relationships between beryl minerals in certain veins
of pegmatites. Trudy Min. muz. no.11:103-113 '61.

(MIRA 16:7)

(Beryl)

(Pegmatites)

KORNETOVA, V.A.; GINZBURG, A.I.

Hydroxyl-herderite from pegmatites of Transbaikalia. Trudy
Min. imiz. no.11:175-180 '61. (MIRA 16:7)

(Transbaikalia--Herderite)
(Transbaikalia--Pegmatites)

GINZBURG, A.I.

Some regularities in the distribution of rare metal pegmatite
fields. Trudy IGEH no.41:37-47 '61. (MIRA 14:8)
(Pegmatites)

GINZBURG, A.I.; RODIONOV, G.O.

Criteria for prospecting for and evaluating rare-metal pegmatites
as proposed by K. A. Vlasov. Sov. geol. 4 no.3:127-132 Mr '61.
(MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo
syr'ya.

(Pegamites)
(Metals, Rare and minor)

GINZBURG, A.I., doktor geol.-mineral.nauk

"Handbook on minerals." Vol. 1. Reviewed by A.I.Ginzburg. Vest.
AN SSSR 31 no.9:144-146 S '61. (MIRA 14:10)
(Minerals--Handbooks, Manuals, etc.)

ABDULLAYEV, Kh.M.; GINZBURG, A.I.

Classification of granite pegmatites. Sov.geol. 5 no.1:71-81
Ja '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo
syr'ya.

(Pegmatites--Classification)

TERENT'YEVA, K.F.; GINZBURG, A.I., glavnyy red.; MAIYCHEV, I.I., red.;
RODIONOV, G.G., red.; STEPANOV, I.S., red.; TROKHACHEV, I.A., red.;
FACUTOV, V.P., red.; KHRUSHCHOV, N.A., red.; CHERNO SVITOV, Yu.L.,
red.; SHMANENKOV, I.V., red.; SHCHERBINA, V.V., red.; EYGELES, M.A.,
red.; ROZHKOVA, L.G., red.izd-va; GUROVA, O.A., tekhn.red.

[Rare elements in bauxites] Redkie elementy v boksitakh. Moskva,
Gos.nauchn-tekhn. izd-vo lit-ry po geol.i okhr.nedr, 1959. 47 p.
(Geologiya mestorozhdenii redkikh elementov, no.6). (Mikva 13:12)
(Metals, Rare and minor) (Bauxite)

SHEYNMANN, Yu.M.; APEL'TSIN, F.R.; NECHAYEVA, Ye.A.; GINZBURG, A.I., red.;
MALYSHEV, I.I., red.; POLYAKOV, M.V., red.; RODIONOV, G.G., red.;
STEPANOV, I.S., red.; TROKHACHEV, P.A., red.; FAGUTOV, V.P., red.;
KHRUSHCHOV, N.A., red.; CHERNOSVITOV, Yu.L., red.; SHMANENKOV, I.V.,
red.; SHCHERBINA, V.V., red.; EXGELES, M.A., red.; ROZHKOVA, L.G.,
red.izd-va; BYKOVA, V.V., tekhn.red.

[Alkaline intrusions, their distribution, and the mineralization
associated with them] Shchelochnye intruzii, ikh razmeshchenie i
svyazannaia s nimi mineralizatsiia. Moskva, Gos.nauchno-tekhn.
izd-vo lit-ry po geol.i okhrane nedr, 1961. 176 p. (Geologia
mestorozhdenii redkikh elementov, no.12/13). (MIRA 15:8)
(Rocks, Igneous) (Ore deposits)

ZABOLOTNAYA, N.P.; NOVIKOVA, M.I.; SHATSKAYA, V.T.; GINZBURG, A.I.,
glavnyy red.; POLYAKOV, M.V., zam. glavnogo red.; APEL'SIN,
F.R., red.; GRIGOR'YEV, V.M., red.; RODIONOV G.G., red.;
TROKHACHEV, P.A., red.; FAGUTOV, V.P., red.; KHRUSHCHOV, N.A.,
red.; CHERNOSVITOV, Yu.L., red.; SHMANENKOV, I.V., red.;
SHCHERBINA, V.V., red.; KYGELES, M.A., red.; KOLOSHINA, T.V.,
red. izd-va; BYKOVA, V.V., tekhn. red.

[Tungsten-molybdenum-tin-beryllium deposits and their formation].
Vol'fram-molibden-olovo-berillievye mestorozhdeniia i uslovia
ikh obrazovaniia. Moskva, Gosgeoltekhizdat, 1962. 94 p. (Geo-
logiia mestorozhdenii redkikh elementov, no.18).
(MIRA 16:4)

(Metals, Rare and minor)

SHVEY, Igor' Vladimirovich; GINZBURG, A.I., glavnyy red.; POLYAKOV, M.V.,
zamestitel' glavnogo red.; APEL'TSIN, P.R., red.; GRIGOR'YEV, V.M.,
red.; RODIONOV, G.G., red.; STEPANOV, I.S., red.; TROKHACHEV, P.A.,
red.; FAGUTOV, V.P., red.; KHRUSHCHOV, N.A., red.; CHERNOSVITOV,
Yu.L., red.; SHMANENKOV, I.V., red.; SHCHERBINA, V.V., red.;
EYGELES, M.A., red.; ENTIN, M.L., red.izd-va; BYKOVA, V.V., tekhn.red.

[Basic geochemical problems of rare earth elements and yttrium in
endogenic processes] Osnovnye voprosy geokhimi redkozemel'nykh
elementov i ittriia v endogennykh protsessakh. Moskva, Gos. nauchn.-
tekhn. izd-vo lit-ry, po geologii i okhrane neдр, 1962. 105 p.
(Geologia mestorozhdenii redkikh elementov, no.15). (MIRA 15:11)
(Rare earth metals) (Yttrium)

GINZBURG, A.I.; EPSHTEYN, Ye.M.

Conclusion; main problems in studying the massifs of ultrabasic
alkali rocks and carbonatites. Geol. mest. red. elem. no.17:
142-147 '62. (MIRA 16:10)

(Ultrabasic) (Carbonatites)

GINZBURG, A.I.

Petrographic characteristics of sapropelites and saprohumolites.
Sov.geol. 5 no.8:62-78 Ag '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut.
(Sapropelites)

GRABOVSKAYA, Lidiya Ivanovna; ASTRAKHAN, Yevgeniy Davidovich; GINZBURG, A.
I., glavnyy red.; POLYAKOV, M.V., zam.glavnogo red.; KOLOSHINA, T.
V., red.izd-va; BYKOVA, V.V., tekhn.red.

[Biochemical and geobotanical studies in prospecting for rare-
metal deposits.] Biogeokhimicheskie i geobotanicheskie issledo-
vaniia pri poiskakh redkometal'nykh mestorozhdenii. Moskva, Gos-
geoltekhizdat, 1963. 62 p. (Geologiya mestorozhdenii redkikh ele-
mentov, no.19). (MIRA 17:2)

STAVROV, O.D.; GINZBURG, A.I., glavnyy red.; POLYAKOV, M.V., zam. glav-
nogo red.; APEL'TSIN, F.R., red.; GRIGOR'YEV, V.M., red.; RODIO-
NOV, G.G., red.; STEPANOV, I.S., red.; TROKHACHEV, P.A., red.;
FAGUTOV, V.P., red.; KHRUSHCHOV, N.A., red.; CHERNOSVITOV, Yu.L.,
red.; SHMANENKOV, I.V., red.; SHCHERBINA, V.V., red.; EYGELES,
M.A., red.; FEDOTOVA, A.I., red.izd-va; IYERUSALIMSKAYA, Ye., tekhn.
red.

[Basic characteristics of lithium, rubidium, cesium in the process
of the formation granite intrusives and the pegmatites connected
with them.] Osnovnye cherty geokhimii litia, rubidia, tsezia v
protsesse stanovleniia granitnykh intruzivov i svyazannykh s nimi
pegmatitov. Moskva, Gosgeoltekhizdat, 1963. 140 p. (Geologia mes-
torozhdenii redkikh elementov, no.21). (MIRA 17:2)

EGEL', Lev Yeven'yevich; YERSHOV, A.D., glavnyy red.; ZUBREV, I.N., zam. glavnogo red.; GUDALIN, G.G., red.; KRASHNIKOV, V.I., red. [deceased]; KOKESHKOV, B.Ya., red.; MOMDZHI, G.S., red.; POZHARITSKIY, K.L., red.; SMIRNOV, V.I., red.; SOLOVOV, A.P., red.; TROYANOV, A. T., red.; FILIPPOVSKAYA, T.B., red.; KHRUSHCHOV, N.A., red.; CHERNOSVITOV, Yu.L., red.; GINZBURG, A.I., red.vypuska; PROKOF'YEV, A. P., red.vypuska; SOKOLOVSKAYA, Ye.Ya., red.razd-va; BYKOVA, V.V., tekhn.red.

[Rare-earth metals.] Redkezemel'nye metally. Moskva, Gostoptekhnizdat, 1963. 332 p. (Otsenka mentorozhdenii pri poiskakh i razvedkakh, no.21). (MIRA 17:2)

A. I. GINSBURG (USSR)

"The peculiarities of rare-elements concentration in endogenic processes."

Report presented at the Conference on Chemistry of the Earth's Crust,
Moscow, 14-19 Mar 63.

1. The first of these is the fact

that the first of these is the fact
and the second of these is the fact
to the fact.

The first of these is the fact

(1) (2) (3)

GINZBURG, A.I.; BELENZINA, L.A.; SHARMIN, N.F.

Surface studies of arial anomalies characteristic of some
types of rare metal deposits. Geol. ~~met.~~ ^{min.} res. elem. no. 20:
84-115 '69. (MIRA 1975)

mes

UNKSOV, V.A.; BOROVNIKOV, P.P.; RUNDKVIST, D.V.; PAVLOVA, I.G.;
ALYAVDIN, V.F.; VOLOSTNYKH, G.T.; ROZINOV, M.I.; SHCHEGLOV, A.D.;
IVANOVA, A.A.; KORMILITSYN, V.S.; SHCHEGLOV, A.D.; ARTEMOV, V.R.;
RYTSK, Yu.Ye.; GINZBURG, A.I.; DORTMAN, N.B.; TOPORETS, S.A.;
TRUNINA, V.Ya.; YAKOVLEV, I.K.; BOGDANOVA, L.A.; SARBETEVA, L.M.

Problems of the geology and characteristics of the distribution
of mineral deposits. [Trudy] VSEGEI 92:53-89 '63. (MIRA 17:4)

GINZBURG, A.I.

Genetic classification of humic coals. Izv. AN SSSR Ser. geol.
29 no.7:94-98 J1 '64 (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut,
Leningrad.

GINZBURG, A.I.

Present status of studies of pegmatites and problems for further investigation. Geol. mass. red. elem. no. 2284-41'6.

(MIRA 17:7)

Effect of external pressure on the course of the pegmatite process. Ibid. 224-22

GINZBURG, A.L.; SHATSKAYA, V.T.

Some data on the migration of beryllium in the supergene zone of
a fluorite-beryllium deposit. Dokl. AN SSSR 159 no. 5:1051-1054
D '64 (MIRA 18:1)

1. Predstavleno akademikom D.S. Korzhinskii.

GORZHEVSKAYA, Susanna Aleksandrovna; SIDORENKO, Galina Aleksandrovna;
GINZBURG, A.I., glavnyy red.; POLYAKOV, M.V., zamestitel' glavnogo
red.; APEL'TSIN, F.R., red.; GRIGOR'YEV, V.M., red.; RODIONOV, G.G.,
red.; STEPANOV, I.S., red.; TROKHACHEV, P.A., red.; FAGUTOV, V.P.,
red.; CHERNOSVITOV, Yu.L., red.; SHMANENKOV, I.V., red.; SHCHERBINA,
V.V., red.; EYGELES, M.A., red.

[Titano-tantalo-niobates. Part 2.] Titano-tantalo-niobaty.
Moskva, Nedra. Pt.2. 1964. 115p. (Geologiya mestorozhdenii
redkikh elementov, no.23) (MIRA 18:1)

VLASOV, K.A.; BELOV, N.V.; VOL'FSON, F.I.; GENKIN, A.D.; GINZBURG, A.I.;
LUKIN, L.I.; KORZHINSKIY, D.S.; SALTYSOVA, V.S.; SAUKOV, A.A.;
SOKOLOV, G.A.; SHCHERBAKOV, D.I.; SHADUN, T.N.

Konstantin Avtonomovich Nenadkevich, 1830-1963; obituary. Geol.
rud. mestorozh. 6 no.1:123-125 Ja-F '64.

(MIRA 17:11)

BLOKH, A.M.; KOCHENOV, A.V.; GINZBURG, A.I., glavnyy red.; APEL'TSIN, F.R., red.;
GRIGOR'YEV, V.M., red.; POLYAKOV, M.V., red.; RODIONOV, G.G., red.;
STEPANOV, I.S., red.; TROKHACHEV, P.A., red.; FAGUTOV, V.P., red.;
CHERNOSVITOV, Yu.L., red.; SHMANENKOV, I.V., red.; SHCHERBINA, V.V.,
red.; EYGELES, M.A., red.

[Impurity elements in bone phosphate of fossil fishes.] Elementy-
primesi v kostnom fosfate iskopaemykh ryb. Moskva, Nedra, 1964.
106 p. (Geologiya mestorozhdenii redkikh elementov, no.24).

(MIRA 19:1)

KUDRIN, V.S.; KUDRINA, M.A.; SHURIGA, T.N.; QINZBURG, A.I., glavnyy red.;
APEL'TSIN, F.R., zamestitel' glavnogo redaktora; CHERNYSHEVA,
L.V., red.; BEUS, A.A., red.; GREKULOVA, L.A., red.;
GRIGOR'YEV, V.M., red.; ZABOLOTNAYA, N.P., red.; MATIAS, V.V.,
red.; POKALOV, V.T., red.; RODIONOV, G.G., red.; STEPANOV, I.S.,
red.; CHERNOSVITOV, Yu.L., red.; SHMANENKOV, I.V., red.

[Rare-metal metasomatic formations associated with subalkaline
granitoids.] Redkometal'nye metasomaticheskie obrazovaniia,
svyazannye s subshchelochnymi granitoidami. Moskva, Nedra,
1965. 145 p. (Geologiya mestorozhdenii redkikh elementov,
no.25) (MIRA 18:8)

ACC NR: AP6005800

(A)

SOURCE CODE: UR/0413/66/000/001/0038/0038

INVENTOR: Ginzburg, A. I.; Lemekhov, V. N.; Chernyak, I. N.

31
B

ORG: none

TITLE: A rectified voltage regulator. ²⁵ Class 21, No. 177470

SOURCE: Izobreteniya, promyshlennyye obrastys, tovarnyye znaki, no. 1, 1966, 38

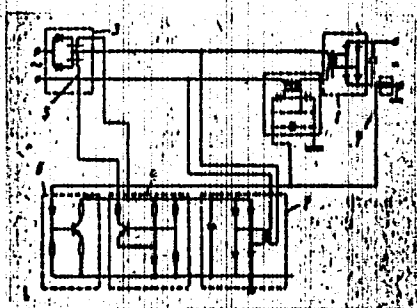
TOPIC TAGS: voltage regulator, electronic feedback, electronic rectifier

ABSTRACT: This Author's Certificate introduces a rectified voltage regulator which contains power and analog rectifiers connected to the output of an ac voltage regulator. The device also contains a unit which compares the analog rectifier voltage with a standard. This comparator acts on the control circuit of the ac regulator. Stability under varying load conditions is improved by using current feedback from the power rectifier load to control a variable resistor connected in parallel with the comparator.

UDC: 621.316 : 722.1 : 621.314.632

Card 1/2

ACC NR: AP6005300



1--power rectifier; 2--analog rectifier;
3--ac voltage regulator; 4--voltage comparat-
or; 5--ac regulator control unit; 6--vari-
able resistor; 7--feedback circuit

SUB CODE: 09/

SUBM DATE: 05May84

Card 2/2

Comparative studies on blood picture in mice of various strains.
Trudy AMN SSSR 21 no.4:198-206 '52. (MLRA 10:8)

1. Iz laboratorii onkologii (zav. - chlen-korrespondent AMN SSSR
prof. L.M.Shabad) Instituta normal'noy i patologicheskoy morfologii
AMN SSSR (dir. - akademik A.I.Abrikozov) i kafedry laboratornoi
diagnostiki (zav. - prof. Ye.A.Kost) Tsentral'nogo instituta
usovershenstvovaniya vrachey (dir. V.P.Lebedeva)

(BLOOD:

picture, in mice, comparison in various strains)

(MICR,

blood picture in various strains, comparison)

SAYDAKOVSKIY, A.G., kand.meditsinskikh nauk; GINZBURG, A.M., ordinator

Nevus flammeus and glaucoma. Oft. zhur. 15 no.5:292-294 '60.
(MIRA 13:9)

1. Iz glaznogo otdeleniya (zav. -- A.G. Saydakovskiy) 1-y gorodskoy
klinicheskoy bol'nitsy Pecherskogo rayona, Kiyev.
(MOLE (DERMATOLOGY)) (GLAUCOMA)

GILDED, A.L.

Optical designation of oscillograms. Priborostroenie no.11:26
11 '61. (MIRA 14:10)
(Oscillography)

GINZBURG, A.M., vrach

Symptom of the digital supradental pressure in the clinical aspects of acute odontogenic inflammatory processes. Vop. obshchei stom. 17:64-67 '64.

(MIRA 18:11)

1. Dorozhnaya bol'nitsa No.2 Yugo-Zapadnoy zheleznoy dorogi.

GINZBURG, A.M., inzh.

Automation of given gradients in the operation of excavating machines. Mekh. stroi. 19 no.6:28-29 Jo '62. (MIRA 17:2)

ZELICHENOK, G.G.; GINZBURG, A.M., red.

[Automation of machinery and production processes in road construction] Avtomatizatsiia mashin i proizvodstvennykh protsessov v dorozhnom stroitel'stve. [n.p.] Mosvuzizdat, 1963. 111 p.
(MIRA 17:6)

ACC NR: AT7004921

SOURCE CODE: UR/0000/66/000/000/0013/0019

AUTHOR: Vittikh, V. A. (Novosibirsk); Ginzburg, A. N. (Novosibirsk);
Drobyshev, Yu. P. (Novosibirsk)

ORG: none

TITLE: Methods of measurement signals compression [Classification and review]

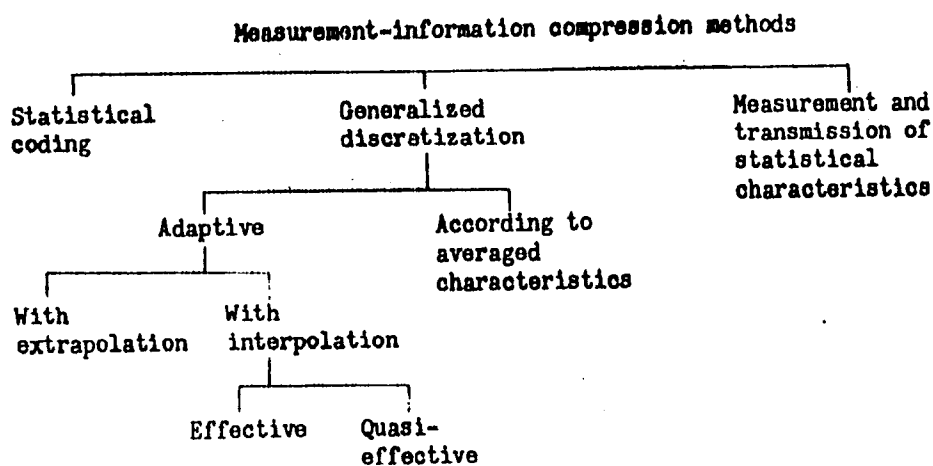
SOURCE: Vses. konf. po avtomatich. kontrol i metodam elektrich. izmereniy, 6th, 1964. Avtomatich. kontrol' i metody elektrich. izmereniy; tr. konf., t. I: Teoriya izmerit. info. sistem (Automatic control and electrical measuring techniques; transactions of the conference, v. 1: Theory of measuring information systems). Novosibirsk, Izd-vo Nauka, 1966, 13-19

TOPIC TAGS: measurement, information processing, data processing, ~~information compression~~ *signal coding*

ABSTRACT: Based on ten 1955-66 Soviet sources and one 1962 U.S. source, a classification diagram (see figure) is presented, and modern information-compression methods are reviewed. Compression of information by measuring signal statistics (H. Blasbalg et al., IRE Trans., no. 3, Sep 1962) is explained. Another group of methods (statistical coding) using signal statistics converts a sequence of messages at

Cord 1/3

ACC NR. AT7004921



the input into output binary signals. Unlike the preceding method, these methods preserve the sequence of events. In the predictive coding method, statistical redundancy is eliminated; only the difference signal (real value minus predicted value) is transmitted; the well-known delta-modulation method belongs with this group. The methods of general discretization are subdivided into two large groups: (1) Averaged-

ACC NR: A T 7004921

characteristic group in which the quantization interval is either selected from the maximum frequency of signal spectrum (Kotel'nikov's theorem) or is set under the correlation interval (continuous quasi-stationary signals with unlimited spectrum); in both cases, the quantization interval is constant; (2) Adaptive methods in which the quantization interval is variable; it depends on the present signal characteristic (e.g., its present derivative). The choice of compression method depends on the demands of the information recipient, viz., on the proximity criteria, complexity of materialization, permissible signal delay, etc. Methods of compression of signal connected with the reduction of its entropy seem promising; of these, most efficient are the methods of generalized adaptive discretization with extrapolation or interpolation of signals. Orig. art. has: 2 figures and 11 formulas.

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 010 / OTH REF: 001

ACC NR: AT7004922

SOURCE CODE: UR/0000/66/000/000/0020/0023

AUTHOR: Vittikh, V. A. (Novosibirsk); Ginzburg, A. N. (Novosibirsk);
Drobyshev, Yu. P. (Novosibirsk)

ORG: none

TITLE: Method of discretization of measurement signals

SOURCE: Vses. konf. po avtomatich. kontrol i metodam elektrich. izmereniy, 6th, 1964. Avtomatich. kontrol' i metody elektrich. izmereniy; tr. konf., t. I: Teoriya izmerit. info. sistem (Automatic control and electrical measuring techniques; transactions of the conference, v. 1: Theory of measuring information systems). Novosibirsk, Izd-vo Nauka, 1966, 20-23

TOPIC TAGS: measurement, information processing, data processing, information compression *Signal element*

ABSTRACT: Assuming that a certain delay in measurand transmission and a certain error are permissible, the following method of quantization and compression of measurement signals is suggested: The signal $f(t)$ is expanded into an orthogonal-function series within interval $a \leq t \leq b$, and only expansion coefficients are transmitted over the communication channel. Calculation of the first $n+1$ coefficients c_0, c_1, \dots, c_n is reduced to multiplying the vector $\vec{z} = [\varphi^{(-1)}(b), -\varphi^{(-2)}(b), \dots, (-1)^n \varphi^{(-n-1)}(b)]$

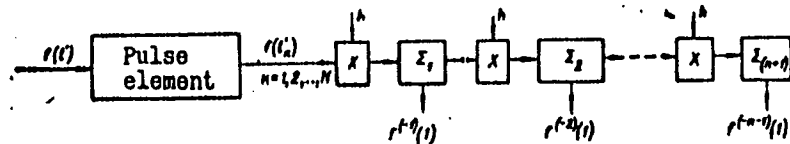
ACC NR: AT7004922

by the matrix $A = \begin{bmatrix} \dot{p}_0(b), 0 & \dots & 0 \\ \dot{p}_1(b), \dot{p}_1^{(1)}(b), \dots & 0 \\ \dots & \dots & \dots \\ \dot{p}_n(b), \dot{p}_n^{(1)}(b), \dots & \dot{p}_n^{(n)}(b) \end{bmatrix}$ or $\begin{bmatrix} c_0 \\ c_1 \\ \vdots \\ c_n \end{bmatrix} = \bar{d} \cdot A$

Here, A remains constant and \bar{d} depends on $f(t)$; hence, it is sufficient to transmit components of \bar{d} which are the results of successive integrations

of $f(t)$ or a modified function $f(t')$. The latter is applied to a pulse element (see figure) which generates regular pulses corresponding to the function values and sends

them to multiplying unit x which multiplies them by the integration interval h . A series of summators prepares final signals. The



system can be further simplified in the cases where multiplying-by- h operations can be performed at the receiving end. The method is offered for telemetry systems, particularly for the cases where the automatic processing at the transmitting end must be simple. Orig. art. has: 2 figures and 13 formulas.

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 006

VITVINI, V.A. (Novosibirsk); GINER, A.A. (Novosibirsk)

Optimal discrimination of near resonant signals. *Optoelectronics no. 3*
16-33 '85. (MIL 19:1)

1. Submitted Sept. 15, 1984.

APPROVED FOR RELEASE
L 47055-88
ACC NR: AP6015323

SOURCE CODE: UR/0410/65/000/003/0026/0033

AUTHOR: Vittikh, V. A. (Novosibirsk); Ginzburg, A. N. (Novosibirsk)

ORG: none

TITLE: Optimal encoding of telemetry signals [Paper presented at the Sixth All-Union Conference on Automatic Control and Electric Measurement Methods held in Novosibirsk in September 1964]

SOURCE: Avtometriya, no. 3, 1965, 26-33

TOPIC TAGS: telemetry technique, error minimization, dynamic programming, signal coding, successive approximation method

ABSTRACT: Optimal encoding of fully known continuous signals, considered as determined functions of time, is discussed mathematically. The problem reduces itself to the minimization of some error functional, or to determining the minimal value of c -entropy by successive approximation. Dynamic programming is deemed preferable to standard methods of classic analysis, even though it requires the employment of a universal digital computer. Orig. art. has: 23 formulas.

SUB CODE: 09,12/ SUBM DATE: 15Sep64/ ORIG REF: 004/ OTH REF: 008
Card 1/1 ULR UDC: 62-503

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VITIKH, V.A. (Novosibirsk); GINZBURG, A.N. (Novosibirsk)

Algorithm for data collection control. Avtometriia no.4:
28-35 '65. (MIRA 18:9)

.L 11119-88

ACC NR: AP6002011

SOURCE CODE: UR/0288/65/000/003/0037/0041

AUTHOR: Vittikh, V. A.; Ginzburg, A. N.; Kulikovskiy, K. L. 14B

ORG: Institute of Automatic and Electrometry, Siberian Branch, AN SSSR (Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR)

TITLE: Determining the maximum deflection angle of the moving component of an electrometer

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 3, 1965, 37-41

TOPIC TAGS: electrometer, electrometric amplifier

ABSTRACT: Sensitivity of an electrometric amplifier depends, among other things, on the maximum permissible angle θ of deflection of the moving component of the electrometer; hence, increasing the electrometer range may result in considerably higher output of the amplifier. Formulas are developed which permit determining θ_{\max} from a specified nonlinearity of the torque-deflection angle ratio; the torque curve is approximated by Chebyshev polynomials. A 9-step computation procedure is suggested. Orig. art. has: 20 formulas.

SUB CODE: 09 / SUBM DATE: 23Mar65 / ORIG REF: 002 / OTH REF: 001

Card 1/1 HW

UDC:621.317.745:621.317.723

VITTIKH, V.A.; GINZBURG, A.N.; KULIKOVSKIY, K.I.

Determining maximum angle of deflection of the movable part
of an electrometer. Izv. SO AN SSSR no. 10. Ser. tekhn. nauk
no. 3:37-41 '65 (MIRA 19:1)

1. Institut avtomatiki i elektrometrii Sibirskogo otdeleniya
AN SSSR, Novosibirsk. Submitted March 23, 1965.

ALL 39-86
ACC NR: AP015382

(N)

SOURCE CODE: UR/0410/65/000/004/0028/0035

AUTHOR: Vittikh, V. A. (Novosibirsk); Ginzburg, A. N. (Novosibirsk)

ORG: none

TITLE: One algorithm for the control of information collection 160

SOURCE: Avtometriya, no. 4, 1965, 28-35

TOPIC TAGS: algorithm, data acquisition, Legendre polynomial, automatic control design, analog digital converter

ABSTRACT: The authors consider an algorithm for the control of information collection from the source of a continuous signal. Based on the use of orthogonal Legendre polynomials and lacking any differentiation step, the algorithm possesses certain filtration properties due to a double integration of the signal with noise. The structural principle of adaptive discretizers based on the use of Legendre polynomials is analyzed, and it is shown that the error incurred in the uniform approximation of a signal by zero- and first-order orthogonal Legendre polynomials can be rather easily computed. By establishing the relation of this error to the linear integration error of the signal, a functional diagram of an information collection control device for use with this algorithm is presented. In essence, this device controls the time the

Card 1/2

UDC: 62-503

ACC NR: AP 15382

test signal is connected to the analog-digital converter. The algorithm discussed for the control of information collection from a continuous signal source is an interpolation algorithm. Unlike well-known extrapolation algorithms, which are based on a prediction of signal properties from the value of the signal itself and its derivatives at a point $t=0$ and which are less flexible (since the approximation line does not undergo a parameter change as the time segment is increased) this algorithm makes it possible to obtain large compression factors. Moreover, using as it does orthogonal Legendre polynomials, this algorithm is superior to extrapolation algorithms in terms of its noise-suppression characteristic because it employs a double integration of the signal. Orig. art. has: 2 figures and 5 formulas.

SUB CODE: 05,12,09/ SUBM DATE: 10Apr65/ ORIG REF: 006

GINZBURG, A.R.

GR-700-4 gas-turbine unit. Gaz. prom. 4 no. 7:41-45 J1 '59.
(MIRA 12:10)
(Gas, Natural--Pipelines) (Compressors) (Gas turbines)

GINZBURG, Abram Solomonovich, prof.; MIKHEYEVA, Natal'ya Semenovna;
BAH'YEV, Nikolay Nikolayevich; SYROYEDOV, Viktor Iudovich;
GRACHEV, Yuriy Pavlovich; ZHURAVLEV, Vyacheslav Fedorovich;
DASHEVSKIY, V.I.; FEDOROV, N.Ye., prof., retsenzent;
SEREGIN, P.V., dots., retsenzent; GORBATOV, A.V., dots.,
retsenzent; ROGOV, I.A., dots., retsenzent; KOVALEVSKAYA,
A.I., red.

[Processes and apparatus of the food industry; practical
laboratory work] Protseessy i apparaty pishchevykh proiz-
vodstv; laboratornyi praktikum. [By] A.S.Ginzburg i dr.
Moskva, Pishchevaia promyshlennost', 1964. 270 p.

(MIRA 17:11)

1. Moskovskiy tekhnologicheskii institut myasnoy i molochnoy
promyshlennosti, kafedra protsessov i apparatov (for Fedorov,
Rogov, Gorbatov). 2. Vsesoyuznyy zaochnyy tekhnologicheskii
institut pishchevoy promyshlennosti (for Seregin).